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Finishing Today's 2007 Innovation Awards  
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A “stainless steel” ceramic coating, an atmospheric plasma pretreatment technology, a non-contact film thickness instrument, a periodic pulse reverse plating system and a water recycling system are this year's hottest innovations.

It's time again to recognize and honor the cutting-edge innovators in our industry. Over the past few months, we received a number of nominations from across the globe for these awards. We've set aside this special article to recognize the greatest achievements in new technology in materials, process, instrumentation and equipment. This year, with our expanded coverage of the plating industry, we also have added an award for the greatest advancement in this technology.



The awards this year go to enterprises ranging from global organizations to a small machine shop in Colorado. It is our distinct honor and pleasure to present the 2007 Finishing Today Innovation Awards.

### **TASROP, Inc. STW Water Filtration System**

Robert Miller runs TASROP, Inc., a powder coating job shop at the foothills of the Rocky Mountains in Florence, CO. It's part of a full service machine shop he started in 1998. His powder coating operation had always been environmentally friendly; however, the company still had to deal with the high costs and environmental impact associated with disposing of wastewater generated from his metal pretreatment system.

A local drought spurred Miller to seek a solution, but there didn't appear to be any technology available to accomplish the job. So he created his own system. The resulting equipment, which he calls the Save the Water (STW) recycling system, reduced his water usage from 16,000 gallons of water per month to 1200 gallons per month, and from three barrels of chemicals per month to one and a half barrels per year — a 90% savings on water and chemicals.

The system processes the contaminated water and chemical solutions through its proprietary filtration system, then refilters the solution continually and pumps it back into the power washer/cleaning system. Miller calculated that a company using 15,000 to 18,000 gallons of water and 165 to 185 gallons of chemical cleaning agent per month could decrease its usage to less than 1,200 gallons of water and 7 gallons of cleaning agent per month by using the new recycling system. Based on that model, a small business could potentially save \$17,000 per year — while also helping to protect valuable natural resources.

*Editor's note: Feature articles on the [Plasmatreat](#), [TASROP](#) and [MacDermid](#) technologies have appeared in past issues of Finishing Today magazine.*